

MONTHLY NOTICES

OF THE

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No. 1.

The Rev. R. MAIN, President, in the Chair.

Lieut. Wm. Chimmo, H. M. S. Seagull,
was balloted for and duly elected a Fellow of the Society.

The Astronomische Nachrichten.

A new volume of this important periodical, the fifty-second, is about to commence. The price of a volume is fifteen shillings, payable in advance. There are generally published two volumes in the course of a year. Subscriptions are received by Mr. Williams, Assistant-Secretary of the Society. It may be mentioned that the *Astronomische Nachrichten* admits into its columns contributions in any other European language besides the staple German.

The Astronomer Royal has lately circulated the following Notice :—

“The construction of the meridional instrument, and the general arrangements in this observatory, offer great advantages for the meridional observations of the small planets ; and it has been my wish to maintain these observations with the utmost practicable regularity. This, however, can be done only with the aid of a very approximate ephemeris.

"In general, ephemerides of the small planets are not wanting ; but their errors are frequently so large as to make it nearly impossible for observers to assure themselves that the object which they see in the meridional telescope is the planet which they are seeking. A great amount of labour is thus wasted. And, finally, I have been compelled to lay down, as a general rule, that small planets are not to be sought on the meridian unless we have a pretty accurate knowledge of the error of the ephemeris.

"It is much to be wished that information on the magnitude of the error could be furnished to me before the meridional observations commence. As good extrameridional determinations are usually obtained before meridional instruments can be used, I venture to request that, as soon as you have secured one or two certain observations of a planet, you will have the kindness to communicate to me a comparison of the observed places with the corresponding places in any published ephemeris. This would probably enable me to observe the planet on the meridian through its entire meridional apparition.

*Royal Observatory, Greenwich,
November, 1859.*

Measures of Saturn and his Rings. By Captain W. S. Jacob,
Director of the Madras Observatory.

Measures of the Satellites of Saturn with the Madras Equatorial. By Captain W. S. Jacob.

Measures of Saturn and his Satellites. By Captain W. S. Jacob.*

The first of these papers contains a series of measures of *Saturn* and his rings, executed at the Madras Observatory in the month of January, 1856. The second paper contains a series of measures of the satellites of *Saturn*, executed at the same observatory, and extending from November 6, 1856, to April 10, 1858. In the third paper the author has given a very elaborate discussion of these measures, and has deduced from them corrections to the elements of the orbits of the respective satellites. The materials which form the basis of investigation are divided into two groups, from each of which he derives a corresponding set of elements. The first group consists of measures executed in 1856 and in the early part of 1857. An abstract of the results for this group will be found in Vol. xviii. of the *Monthly Notices* (page 1 *et seq.*). The

* These papers by Captain Jacob, as well as those which follow, and also the papers of which abstracts are given at pages 61 and 68 of vol. xix. of the *Monthly Notices*, are published *in extenso* in the twenty-eighth volume of the *Memoirs* of the Society, at the expense of the India Government.—R. G.